

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | | |
|---|--|---|---|
| Applicant's or agent's file reference 0000054922 | FOR FURTHER ACTION | | see Form PCT/ISA/220 as well as, where applicable, item 5 below. |
| International application No. PCT/EP2004/011294 | International filing date (day/month/year) 08/10/2004 | (Earliest) Priority Date (day/month/year) 10/10/2003 | |
| Applicant BASF PLANT SCIENCE GMBH | | | |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

TRANS-2-ENOYL-COA REDUCTASE GENE OF EUGLA GRACILIS

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☐ as suggested by the applicant.

☒ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2004/011294

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
- ☒ a sequence listing
- ☐ table(s) related to the sequence listing
- b. format of material
- ☒ in written format
- ☒ in computer readable form
- c. time of filing/furnishing
- ☒ contained in the international application as filed
- ☒ filed together with the international application in computer readable form
- ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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International Application No
PCT/EP2004/011294

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/02 C12N15/82 A01H5/00 C12P7/64

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N A01H C12P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, Sequence Search, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | <p>INUI H ET AL: "PURIFICATION AND SOME PROPERTIES OF SHORT CHAIN-LENGTH SPECIFIC TRANS-2 ENOYL COENZYME A REDUCTASE IN MITOCHONDRIA OF EUGLENA-GRACILIS" JOURNAL OF BIOCHEMISTRY (TOKYO), vol. 100, no. 4, 1986, pages 995-1000, XP002272816 ISSN: 0021-924X cited in the application the whole document</p> <p style="text-align: center;">----- -/--</p> | 1,2,7-11 |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

15 December 2004

Date of mailing of the international search report

28/12/2004

Name and mailing address of the ISA

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Blanco Urgoiti, B

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/011294

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | <p>DATABASE UniProt 'Online! 1 June 2003 (2003-06-01), "Hypothetical protein VP1231." XP002310559 retrieved from EBI accession no. UNIPROT:Q87QB9 Database accession no. Q87QB9 sequence data</p> | 1,2,7 |
| X | <p>DATABASE EMBL 'Online! 1 September 2000 (2000-09-01), STOVER C.K. ET AL.: "Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathogen" XP002272819 Database accession no. AE004721 *nts 5060 to 6239* *hypothetical protein Q9HZP8* page 3</p> | 7,9 |
| A | <p>INUI H ET AL: "FATTY-ACID SYNTHESIS IN MITOCHONDRIA OF EUGLENA-GRACILIS" EUROPEAN JOURNAL OF BIOCHEMISTRY, vol. 142, no. 1, 1984, pages 121-126, XP008028490 ISSN: 0014-2956 cited in the application</p> | |
| A | <p>OHLROGGE JOHN ET AL: "Lipid biosynthesis" PLANT CELL, vol. 7, no. 7, 1995, pages 957-970, XP002272818 ISSN: 1040-4651 cited in the application</p> | |
| A | <p>WO 03/054189 A (BIESGEN CHRISTIAN ; SUNGENE GMBH & CO KGAA (DE)) 3 July 2003 (2003-07-03) sequences 11,35 the whole document</p> | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP2004/011294

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| WO 03054189 | A | 03-07-2003 | CA 2470329 A1 | 03-07-2003 |
| | | | WO 03054189 A2 | 03-07-2003 |
| | | | EP 1458875 A2 | 22-09-2004 |
